

REMARKS

Claims 20-38 are pending in this application. Claims 23-28 and 31-38 are withdrawn. Claim 20 is currently amended. No new matter has been added.

CLAIM REJECTION 35 USC §112

At page 3, the Office Action rejects claims 20-22 and 29-30 under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicants respectfully traverse the rejection.

Amended claim 20 addresses each of the issues noted in the Office Action. Accordingly, Applicants request reconsideration and withdrawal of the rejection.

CLAIM REJECTION 35 USC §103

At page 4, the Office Action rejects claims 20-22 and 29-30 under 35 U.S.C. § 103(a) as being unpatentable over DIDIER et al. (Eur J Organic Chem (2001) 1917-1926) in view of WHEELHOUSE et al. (US 6,087,493). Applicants respectfully traverse the rejection.

Claim 1 is directed to a compound corresponding to formula (I) with several defined substituents. The Office Action contends that DIDIER teaches different atropisomers of TAPP and the functionalization of porphyrins where zinc(II) completes the coordination sphere with the oxygen-donor ligand -COOEt₂. The Office Action recognizes that DIDIER fails to teach the $\alpha\beta\alpha\beta$

atropisomer form or carboxylic anion as a specific group oxygen-donor ligand. The Office Action relies on WHEELHOUSE in combination with DIDIER.

WHEELHOUSE relates to porphyrins without chains that have completely different structures compared to the compounds of formula (I). The WHEELHOUSE porphyrins have a planar structure and can be inserted into DNA chains in order to inhibit telomerase activity. In contrast, the compounds according to formula (I) as recited in claim 20 are three-dimensional structures that cannot be inserted in DNA chains. There is no suggestion of the use of such compounds to form a complex with metal ions.

WHEELHOUSE discloses that the porphyrin shall bear an electron-withdrawing group at the meso position (see, column 18). In contrast to WHEELHOUSE, the porphyrin according to the presently claimed compound of formula (I) bears aniline or anilide groups. Also, whereas the electron withdrawing groups in WHEELHOUSE modify the electronic environment of the porphyrin itself, in the claimed compound of formula (I), these groups are attached on the handles and do not have any effect on the electronic environment of the porphyrin.

Because the structure and the role of the porphyrins described in WHEELHOUSE are completely different from the presently claimed porphyrins, one of ordinary skill in the art

would not have completed the metal complex disclosed in DIDIER in order to optimize the efficacy of the porphyrin.

The Office Action appears to form a basis for this rejection in the article co-authored by the present inventor, BOITREL et al. (Eur. J. Inorg. Chem., (2002) 1666-1672). This article discloses the coordination of Zinc(II) with a CO group which belongs to an amide group which in turn belongs to the same chain as the CO group. In the present claims and the compound of formula (I), the CO group belongs to an ester or an acid group which have been added and therefore is hanged, but not included, to the strap. Furthermore, the carboxylate group cannot be compared to an amide group as the former represents a counter-anion for the metal to be chelated; this is not the case for either an amide or an ester group.

The compounds according to formula (I) present two points of functionalization: the -COOH group for stabilizing the metal and the -CH₂NH₂ group for the attachment of an antibody which permits their use in radiotherapy by vectorization. DIDIER and WHEELHOUSE fail to teach or suggest such compounds.

For all of these reasons, DIDIER and WHEELHOUSE fail to teach or suggest, and would not have rendered obvious, claim 20 and claims 21-22 and 29-30 dependent thereon.

CONCLUSION

Entry of the above amendments is earnestly solicited. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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